

## *The Art and Science of Depiction*

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## *Plan of the session*

- Getting acquainted
- What are you expecting?
- Practical details
- Overview of the class

## *Sign up!*

- Name
- E-mail
- Course

## *Presentation*

- Name
- Background
- Professional goals
- Motivation for the class

## *Getting Acquainted visit*

- 1/2h appointment
- E-mail: [fredo@graphics.lcs.mit.edu](mailto:fredo@graphics.lcs.mit.edu)

## *Brainstorming*

- No criticism, in particular no self-criticism
  - The goal is quantity, not quality
- Steal other's ideas
  - Build upon what has been said
- Write everything down
- After the brainstorm: Synthesize

### *A Little Brainstorm*

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- What do you expect from this class?

### *Synthesis of the brainstorm*

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### *What will be discussed*

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- Any figurative picture
- Not only artworks (but mainly)
- Mainly static aspects (but will discuss cinema)

### *Pitch of the class*

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- Does not discuss essence of Beauty or Art
- We do not give recipes to make pictures
- No social/gender/political aspect
- This is only one possible viewpoint on images
  
- Technical issues about depiction
- Perception
- Language and tools to describe, compare and generate pictures

### *Some personal motivations*

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- Get some culture
- Importance of multi-disciplinarity
- Applications to Computer Graphics

### *Sharing knowledge*

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- Relativism
- Your knowledge
  - Probably more than us on some aspect
  - Share it!

## *Questions?*

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## *Organization of the sessions*

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- Brainstorming about the previous lecture
- Lecture
  - Attendance is mandatory
  - Ask questions during the lecture
  - Slides will be on the web
- Talks
- Discussion about the readings
  - Prepare your two issues

## *Organization off-sessions*

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- Reading: 3h/week
  - 2 books + articles and chapters
  - 1 page summary + 2 questions each week
- Feedback: 20 min/week
- Assignments: 3h/week
- Talk: 10h
- Project
- Will be discussed and negotiated

## *Assignments*

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- Due at the first session of the week
- Result+1 page description
  - Photoshop
  - Canoma
  - Piranesi
  - Manual activities
- Essays
- After each lecture:
  - Bring an illustrative image+half page comment
  - Most important thing you have learnt? (half page)
- Log of your readings/activities\

## *Activities*

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- Peer review
- Snapshots

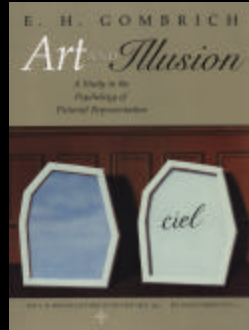
## *Essays*

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- Importance of writing
- Multiple step with peer feedback
  - Outline
  - Draft
  - Final essay
- Provide a comment of the essay

### *Art and Illusion*

- Ernst Gombrich
- 1956
- Art Historian
- Landmark book



### *Cognition and the Visual Arts*

- Robert Solso
- 1994
- Cognitivist
- Excellent textbook



### *Talks*

- Highly flexible
- A book, chapters or articles will be provided
- Related subject
- In-depth specialized subject
- You can propose your own subject
- Look at the suggestions, make a vague decision in two weeks.

### *Projects*

- Highly flexible
- Decide by week 4
- Report and presentation
- Can be
  - Computer Software
  - Essay
  - Multimedia document
  - Psychophysics experiment
  - Manual project

### *Other activities*

- Museums
- Movies
- Further readings
  - Ask
  - Share

### *Questions?*

### *Overview of the class*

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- Introductory discussions
- Human Visual Perception
- Limitations of the 2D medium
- Representation systems

### *Overview of the class*

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- Introductory discussions
  - Limits of realism
  - Chain reality -artist -picture -beholder
  - Dual nature of pictures, 2D/3D
- Human Visual Perception
- Limitations of the 2D medium
- Representation systems

### *Overview of the class*

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- Introductory discussions
- Human Visual Perception
  - Low-level vision
  - Vision as a cognitive process
  - Invariants, constancy
  - Colors
- Limitations of the 2D medium
- Representation systems

### *Overview of the class*

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- Introductory discussions
- Human Visual Perception
- Limitations of the 2D medium
  - The image is flat, the viewpoint is unique
  - The image is finite
  - The image is static
  - The image has a limited contrast and a limited gamut
  - Can be compensated or accentuated
- Representation systems

### *Overview of the class*

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- Introductory discussions
- Human Visual Perception
- Limitations of the 2D medium
- Representation systems
  - Drawing system
  - Denotation system
  - Tone system
  - Style?

### *Questions?*

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### *Next week's assignments*

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- Review of Computer Graphics
- Ansel Adams example
- Photoshop Tutorials